- The extra blood assists with the neonate's cardiopulmonary transition.
- It decreases the risk of fetomaternal transfusion, which is particularly important in rhesus-negative women.
- It lowers the risk of cerebral hemorrhage in premature infants.

Breast Cancer

Breast Cancer Detection

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[*Rev Obstet Gynecol.* 2008;1(3):146]

Combined Screening With Ultrasound and Mammography vs Mammography Alone in Women at Elevated Risk of Breast Cancer

Berg WA, Blume JD, Cormack JB, et al.

JAMA. 2008;299:2151-2163.

The "Coming of Age" of Nonmammographic Screening for Breast Cancer

Kuhl CK.

JAMA. 2008;299:2203-2205.

Mammography screening can reduce mortality from breast cancer by up to 20% in women older than 50 years. It is, however, far from a perfect screening test, as it is uncomfortable, expensive, and reliant on interpretation skills, and has low sensitivity and high false-positive results. For these reasons, other means of screening are continually researched, especially for women at high risk. Such risk may be calculated by family history, personal lifestyle, combined hormone replacement therapy use, *BRCA2* mutagen–positive status, or dense breast tissue. Dense glandular tissue makes standard mammography less accurate, is common in premenopausal women, and is encountered in 33% of menopausal women.

Digital imaging does not eliminate the problem of missing early noncalcified lesions, but it does partially overcome the dense-tissue difficulty. Ultrasound screening offers another alternative, and its use in high-risk women has been reported by Berg and colleagues. Using mammography alone or mammography plus ultrasound, the researchers found that the early cancer detection rates increased from 8 to 12 per 1000 high-risk women screened using mammography plus ultrasound.

However, in women with dense breast tissue, the positive predictive value of ultrasound was 9% compared with 22% for mammography only, implying a major increase in adjunct investigations if ultrasound were added to routine screening. The tradeoff between increased cancers found and extrainvasive tests has to be calculated, as does the cost. Ultrasound equipment is not expensive, nor is the technique demanding—but it is time consuming. A radiologist can complete 3 ultrasound screenings per hour, during which time 50 mammograms could be read. At that allocation of professional time, ultrasound becomes as expensive as magnetic resonance imaging, which detects small uncalcified tumors and has a negative predictive value close to 100%.

In an editorial, Kuhl discusses the public versus individual cost-effectiveness of various screening options and suggests—at present—that mammography looks best.

Preeclampsia

Diagnosing Preeclampsia

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Accuracy of Mean Arterial Pressure and Blood Pressure Measurements in Predicting Pre-Eclampsia: Systemic Review and Meta-Analysis

Cnossen JS, Vollebregt KC, de Vrieze N, et al.

BMJ. 2008;336:1117-1120.

Diagnostic Accuracy of Urinary Spot Protein: Creatinine Ratio for Proteinuria in Hypertensive Pregnant Women: Systemic Review

Côté AM, Brown MA, Lam E, et al.

BMJ. 2008;336:1003-1006.

Mean Arterial Pressure and Prediction of Pre-Eclampsia

Walsh CA, Baxi LV.

BMJ. 2008;336:1079-1080.